

PROTIMETER TIMBERMASTER

D184T - Moisture meter – instructions for use

The Protimeter Timbermaster D184T (illustrated) was introduced in 1984. It is for non-destructive estimation of moisture in timber based on the electrical resistance of timber between two needle probes set in a heavy duty hand probe (not shown). The instrument is powered by one 9 volt PP3 battery. Moisture contents on this meter are expressed as a percentage based on the dry weight of timber, which is the standard measurement method in Europe. The Protimeter Timbermaster may also be used for surveying, but note that the accurate sawn and planed wood values given on the 184T are not maintained accurately on chipboard, mdf, plaster or masonry. Such readings are typically very wide of the mark.



Method of operation: Before use, set the instrument by holding the operating switch in the “**R**” direction and rotating the reference knob marked ‘Reset **R**’ until the meter needle rests at point “**R**” on the scale. If the meter needle cannot quite be brought up to “**R**” by rotation of the “Reset **R**” control, replace the battery. Reading “**R**” is no guarantee of accuracy at other points on the scale, only those points in the 18 to 23% range – (refer to notes on accuracy next page). To take wood readings press the needle probes into the timber. Press the operating switch in the direction %**H₂O** and read the moisture content from the appropriate species scale (see ‘species of timber’ below). *On later 184T models there is a High-Range circuit to read moisture levels above 28%, to employ this press the central button and read the orange figures. Readings above 28% are an approximation.*

Touch Sensor: For veneers or surfaces where pin-holes are unacceptable, unscrew nuts in the heavy duty hand probe, remove pins, replace nuts and use rounded tips of nuts in ‘touch sensor mode’. Note that where surface is covered by a material impervious to battery current eg. Vinyl, then pin probes *must* be used.

Species of Timber: Calibration corrections for 100 timber species are downloadable from www.verus.co.uk When testing a species not marked on the instrument, look up the species identified by letters A to J and make corrections.

The Hammer Probe Accessory: A Protimeter heavy duty probe unit incorporating a sliding hammering device is available as an optional extra. The hammer probe is particularly useful on hard timbers where it is difficult to achieve the required penetration of the needles. Additionally, the hammer probe is fitted with needles having insulated shafts so that the moisture measurement is made between the tips of the needles. This makes it possible to measure moisture content at different depths up to the length of the needles and to obtain readings within the wood which are independent of surface moisture. The hammer probe is fitted with a 3.5mm jack plug and will fit all modern Protimeter instruments.



Temperature Correction: The instrument is calibrated for timber at 20°C (68°F). If the temperature of the timber varies by more than 5°C, the meter reading can be corrected approximately by adding ½% for every 5°C below 20°C or subtracting ½% for every 5°C above 20°C.

Accuracy: To ensure that your moisture meter is working accurately, it is recommended that it is used in conjunction with a CHECKBOX/CALIBRATOR, which will check accuracy at several points across the meter scale. Note that BS EN ISO 9000 *traceability* requirements mean that companies are not required to have both moisture meter *and* Checkbox externally calibrated, only one of them. Companies find it is more convenient to have a Checkbox calibrated externally annually with moisture meter calibration undertaken in-house by themselves.

Repairs: Verus carry spares for old Protimeters, quotations are free of charge.

The information contained in this leaflet is given in good faith. As the method of use of the instrument (and its accessories) and the interpretation of the readings are beyond the control of the maker or supplier, we cannot accept responsibility for any loss, consequential or otherwise, resulting from its use.

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